Name(s) of Risk Team Members: N. Contos, M. Fuhrmann, J. Madaia, A. Piper, T. Roberts, R. Wilke	Point Value → Parameter ↓	1	2	3	4	5
Job Title: Transporting Chemicals and/or Radioactive Materials Job Number or Job Identifier: EENS-JRA-025	Frequency (B)	<u><</u> once/year	≤once/month	≤once/week	≤once/shift	>once/shift
JRA Date:						
Job Description: Transporting chemicals and radioactive materials on site	Severity (C)	First Aid Only	Medical Treatment	Lost Time	Partial Disability	Death or Permanent Disability
Training Procedures List (Optional): Applicable Standard Operating Procedures: Approved by: Date: 5/1/06 Rev. #: Draft	Likelihood (D)	Extremely Unlikely	Unlikely	Possible	Probable	Multiple
Stressors (if applicable, please list all): N/A		Reason for F	Revision (if applic	cable):	Comments: to be reviewe applicability: I chemical wor sealed source Material hand use, Lifting of	d for Hazardous k, Radioactive e use, Iling, Vehicle

				В	efore		ditic	nal rols			F	After			onal rols	
Activity	Hazard	Control(s)	Stressor	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction

				В	efore			onal rols			1	Afte			onal rols	
Activity	Hazard	Control(s)	Stressor	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Packaging hazardous material for transport	Overexertion, laceration	Observe care when handling packages, management emphasis on working safely, knowledgeable staff, packing materials readily available, lab standard/HAZMAT training as required, MSDS, review of applicable EENS JRA documents*, PPE as appropriate	N	1	3	1	2	6								
	Spill of materials	Observe care when handling packages, management emphasis on working safely, knowledgeable staff, packing materials readily available, lab standard/HAZMAT training as required, MSDS, review of applicable EENS JRA documents*, emergency response availability. Infrastructure support (BNL & ISM), DOT regulations, SBMS subject area, work permits, ESR, secure packages to vehicle, review of applicable EENS JRA documents*	Z	1	3	1	2	6								
	Mix of incompatibles	Observe care when handling packages, management emphasis on working safely, knowledgeable staff, packing materials readily available, lab standard/HAZMAT training as required, MSDS, review of applicable EENS JRA documents*	N	1	3	3	1	9								

				В	efore			onal rols			-	Aftei			onal rols	
Activity	Hazard	Control(s)	Stressor	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Personal transport by hand or within a motor vehicle	Overexertion	Observe care when handling packages, management emphasis on working safely, knowledgeable staff, packing materials readily available, lab standard/HAZMAT training as required, MSDS, review of applicable EENS JRA documents*, PPE as appropriate	N	1	3	1	2	6								
	Spill	Observe care when handling packages, management emphasis on working safely, knowledgeable staff, packing materials readily available, lab standard/HAZMAT training as required, MSDS, review of applicable EENS JRA documents*, emergency response availability. Infrastructure support (BNL & ISM), DOT regulations, SBMS subject area, work permits, ESR, secure packages to vehicle, review of applicable EENS JRA documents*	Z	1	3	1	2	6								
	Vehicle collision	Management emphasis on safe driving, site level JRA for driving, review of applicable EENS JRA documents*, NYS or equivalent licensed driver	N	1	3	3	2	18								

			Before Additional Controls				1	Afte			onal rols					
Activity	Hazard	Control(s)	Stressor	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Packaging and transport of radioactive materials	Overexertion	Care with handling packages, management emphasis on working safely, infrastructure support (BNL & ISM) review of applicable EENS JRA documents*	N	1	3	1	2	6								
	Spill	Observe care when handling packages, management emphasis on working safely, knowledgeable staff, packing materials readily available, lab standard/HAZMAT training as required, MSDS, review of applicable EENS JRA documents*, emergency response availability. Infrastructure support (BNL & ISM), DOT regulations, SBMS subject area, work permits, ESR, secure packages to vehicle, review of applicable EENS JRA documents*	N	1	3	1	2	6								
Transport of sealed sources on-site	spill	Observe care when handling packages, management emphasis on working safely, knowledgeable staff, packing materials readily available, lab standard/HAZMAT training as required, MSDS, review of applicable EENS JRA documents*, emergency response availability. Infrastructure support (BNL & ISM), DOT regulations, SBMS subject area, work permits, ESR, secure packages to vehicle, review of applicable EENS JRA documents*	N	1	3	1	2	6								

				В	efor			onal rols			1	Afte			onal rols	
Activity	Hazard	Control(s)	Stressor	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
	Unmonitored exposure	Work planning, work permit, SBMS subject area review of applicable EENS JRA documents*	N	1	2	1	1	2		Г						
Transportation of low level radioactive samples to NSLS	Personnel exposure	Work planning, & control documents review of applicable EENS JRA documents*	N	1	3	1	2	6								
Transporting small quantities of toxic chemicals	Personnel exposure	PPE, sealed containers, Reference existing chemicals JRA review of applicable EENS JRA documents*	N	1	2	3	1	6								
	Spill	Sealed containers, Observe care when handling packages, management emphasis on working safely, knowledgeable staff, lab standard/HAZMAT training as required, MSDS, review of applicable EENS JRA documents*, Infrastructure support (BNL & ISM), DOT regulations, SBMS subject area, work permits, review of applicable EENS JRA documents*	N	1	2	1	1	2								

Further Des	scription of Controls Add	led to Reduce Risk:			
*Risk:	0 to 20 Negligible	21 to 40 Acceptable	41 to 60 Moderate	61 to 80 Substantial	81 or greater